

REMARKS

Claims 1-4, 6-7, 17 and 19-27 are presently pending in the application. Claims 1 and 17 were amended in this response. Claims 8-11, 13-16 and 18 were canceled, without prejudice. Claims 5 and 12 were previously canceled, without prejudice, in the Response filed August 2, 2006. New claims 19-27 have been added in this response. No new matter has been introduced by the amendments. Support for the amendments may be found in paragraphs [004, 027] of the present application. Entry and consideration of this Response are respectfully requested.

Claims 1-2, 4, 6-11, 13, and 15-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Bonnedal* (U.S. Pat. No. 6,246,514) in view of Grubb (US patent 6,344,922). In light of the present amendments, Applicant respectfully traverses this rejection.

Specifically, the cited art, alone or in combination, fails to teach or suggest the features of "providing at least two tilt control units which operate at different speeds to set tilting of a spectrum of data signals in the optical data transmission path; measuring a change in overall power in the optical data transmission path via a quicker operating control unit of the two tilt control units, the quicker operating control unit being connected to at least one filling light source for pumping a transmission fiber of the optical data transmission path, the wavelength of the at least one filling light source lies within a transmission useable wavelength band; and immediately compensating the tilting using Raman effect by changing the power of the at least one filling light source, then returning the power of the at least one filling light source gradually in the direction of an original state existing before the change in overall power using a slower operating control unit of the at least two control units," as recited in claim 1, and similarly recited in claim 19.

Regarding *Bonnedal*, the control units 21 and 22 are disclosed as feed-forward and feedback control units for an optical amplifier, where the control units (21, 22) operate to control the gain or output power of the optical amplifier (col. 5, lines 19-67). The disclosure of *Bonnedal* clearly established that the control units do not bear any relation to controlling tilt, as recited in the present claims. Furthermore, *Bonnedal* is silent regarding the use of Raman effect for compensation of tilting. While the Office Action cites col. 3, lines 53-57 as disclosing tilt compensation, Applicant cannot find such a teaching within the passage. In fact, *Bonnedal* does not appear to disclose tilt compensation anywhere in the disclosure. It follows that *Bonnedal*

also fails to teach or suggest immediately compensating tilt by changing the power of the at least one filling light source, then returning the power of the at least one filling light source gradually in the direction of an original state existing before the change in overall power using a slower operating control unit of the at least two control units. Applicant notes that the Office Action generally cites reference numerals 16, 27, 28, 31 and 22 of FIG. 5 as disclosing the slower operating control unit and reference numerals 23, 24, 21 of FIG. 5 as disclosing the quicker control unit. While *Bonnedal* discloses a rapid control circuit for the feed-forward process (col. 5, lines 44-62), it is entirely unclear to Applicant where in the disclosure of *Bonnedal* there is disclosed "returning the power of the at least one filling light source gradually in the direction of an original state existing before the change in overall power using a slower operating control unit" as recited in the present claims. Applicant kindly requests that, should the present rejection be maintained, that any future Office Action contain a more detailed reference to the documents being relied upon to provide a clearer rationale for the rejection.

Grubb fails to solve the deficiencies of *Bonnedal*, discussed above. Furthermore, Applicants submit that there is no teaching, suggestion or motivation for one of ordinary skill in the art to combine the *Bonnedal* and *Grubb* references in the manner suggested in the Office Action. In making a determination that an invention is obvious, the Patent Office has the initial burden of establishing a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S. P.Q.2d 1955, 1956 (Fed. Cir. 1993). "If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the

teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142).

Further, the Federal Circuit has held that it is “impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention” *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, the Federal Circuit has held that “obvious to try” is not the proper standard under 35 U.S.C. §103. *Ex parte Goldgaber*, 41 U.S.P.Q.2d 1172, 1177 (Fed. Cir. 1996). “An-obvious-to-try situation exists when a general disclosure may pique the scientist curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claim result would be obtained if certain directions were pursued.” *In re Eli Lilly and Co.*, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990).

Regarding the *Bonnedal* document, the disclosure is directed to an optical system having an optical amplifier and a control circuit for regulating the output power of the amplifier with the aid of a feed-forward process demand signal. The control circuit includes a feed-forward block and a first means (13) for tapping light from the input of the amplifier to the feed-forward block to measure the total optical input power (see Abstract; col. 1, line 65 - col. 2, line 26). In contrast, *Grubb* discloses an optical system having a plurality of optical processing nodes in optical communication via at least one signal varying device. The signal varying devices includes an optical fiber suitable for facilitating Raman scattering/gain in a signal wavelength range and a pump energy source for providing pump energy in a plurality of pump wavelengths. The pump source provides sufficient pump energy in each pump wavelength to stimulate Raman scattering/gain in the optical fiber within the signal wavelength range (see Abstract; col. 3, lines 54-65). As discussed above, *Bonnedal* is completely silent regarding Raman scattering and bears no relation to the disclosure in *Grubb*.

In light of the above, Applicant submits that the rejection under 35 U.S.C. §103 is improper and should be withdrawn. As such, independent claims 1 and 8 are now believed to be distinguishable over cited documents. Likewise, dependent claims 2-7 and 9-18 are also believed to be distinguishable over cited documents based on their respective dependencies on claims 1 and 8.

The Applicant respectfully requests withdrawal of the claim rejections and allowance of the application. If there are any additional fees that are due in connection with this application as a whole, the Commissioner is authorized to deduct those fees from Deposit Account No. 02-1818. If such a deduction is made, please indicate Attorney Docket No. 0112740-278 on the account statement.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



Peter Zura
Reg. No. 48,196
Customer No.: 29177

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